

What is claimed is:

1. Apparatus for securing a tissue fold within a patient, the apparatus comprising:
an anchor assembly having proximal and distal anchors connected by a length of suture,
wherein the anchor assembly is adapted for adjustment of the length of suture disposed between the proximal and distal anchors while the anchor assembly is disposed across the tissue fold.
2. The apparatus of claim 1, wherein the anchor assembly is adapted for unidirectional adjustment of the length of suture disposed between the proximal and distal anchors.
3. The apparatus of claim 1, wherein the anchor assembly is adapted for bi-directional adjustment of the length of suture disposed between the proximal and distal anchors.
4. The apparatus of claim 1, wherein the proximal anchor is adapted for adjustment of the length of suture disposed between the proximal and distal anchors.
5. The apparatus of claim 4, wherein the proximal anchor comprises an adjustment mechanism.
6. The apparatus of claim 5, wherein the distal anchor is substantially fixed with respect to the length of suture.

7. The apparatus of claim 5, wherein the adjustment mechanism is chosen from the group consisting of at least two flexible rods separated by a gap and about which the length of suture is wound, a coil spring about which the length of suture is wound, pivoting paddles about which the length of suture is wound, spring material through which the length of suture passes, a one-way valve through which the length of suture passes, a slipknot formed near a the distal end of the length of suture, an inclined plane, and combinations thereof.

8. The apparatus of claim 1 further comprising an anchor delivery system adapted to deploy and secure the anchor assembly across the tissue fold.

9. The apparatus of claim 8, wherein the anchor delivery system comprises a flexible delivery tube having a lumen, and a needle disposed within the lumen.

10. The apparatus of claim 9, wherein the distal anchor is disposed within the needle during delivery.

11. The apparatus of claim 10, wherein the proximal anchor is disposed within the flexible delivery tube during delivery.

12. The apparatus of claim 10, wherein the proximal anchor is disposed within the needle during delivery.

13. The apparatus of claim 10, wherein the anchor delivery system further comprises an anchor tube coupled to a distal region of the flexible delivery tube,

and wherein the proximal anchor is disposed within the anchor tube during delivery.

14. The apparatus of claim 10, wherein the anchor delivery system further comprises an anchor pushrod in communication with an interior of the needle, the anchor pushrod adapted to eject the distal anchor from the needle.

15. The apparatus of claim 14, wherein the anchor pushrod is further adapted to reversibly trap the suture to facilitate adjustment of the length of suture disposed between the proximal and distal anchors, and wherein the anchor pushrod is adapted to release the suture after the length of suture has been adjusted.

16. The apparatus of claim 8 further comprising plication apparatus adapted to form the tissue fold within the patient.

17. The apparatus of claim 16, wherein the anchor delivery system is coupled to the plication apparatus.

18. A method for securing a tissue fold within a patient, the method comprising:

providing apparatus comprising an anchor assembly having proximal and distal anchors connected by an adjustable length of suture;

deploying the distal anchor on a distal side of the tissue fold;

deploying the proximal anchor on a proximal side of the tissue fold; and

adjusting the length of suture disposed between the proximal and distal anchors to secure the tissue fold.

19. The method of claim 18 further comprising:
providing an anchor delivery system;
disposing the anchor assembly within the anchor delivery system; and
advancing the anchor assembly to the tissue fold within the anchor delivery system,
wherein adjusting the length of suture comprises adjusting the length of suture with the anchor delivery system.

20. The method of claim 19 further comprising:
providing plication apparatus; and
forming the tissue fold with the plication apparatus.

21. An adjustable anchor assembly for securing a tissue fold within a patient, the anchor assembly comprising:
a proximal anchor;
a distal anchor; and
a length of suture disposed between the proximal and distal anchors,
wherein the anchor assembly is adapted for adjustment of the length of suture while the anchor assembly is disposed within the patient.